

FIG. 1.

1	MKDVESGRVLLNSAAARGDGLLLGLTRAATLGGGGGLRESRRGKQGARMSSLLGKPLSYTSSQSCRRNVKYRRVQNYL	kcnq5-
1	MKDVESGRVLLNSAAARGDGLLLGLTRAATLGGGGGLRESRRGKQGARMSSLLGKPLSYTSSQSCRRNVKYRRVQNYL	kcnq5-
81	YNVLERPRGWAFIYHAFVLLVFGCLILSVFSTIPEHTKLASSCLLILEFVMIVVFGLEFIIRIWSAGCCCRYRGWQGRLL	kcnq5-
81	YNVLERPRGWAFIYHAFVLLVFGCLILSVFSTIPEHTKLASSCLLILEFVMIVVFGLEFIIRIWSAGCCCRYRGWQGRLL	kcnq5-
161	RFARKPFCVIDTIVLIASIAVVSATQGNIFATSALRSRFLQILRMVRMDRRGGTWKLLGSSVYAHSKELITAWYIGFL	kcnq5-
161	RFARKPFCVIDTIVLIASIAVVSATQGNIFATSALRSRFLQILRMVRMDRRGGTWKLLGSSVYAHSKELITAWYIGFL	kcnq5-
241	VLIFSSFLVYLVEKDANKEFSTYADALWWGTITLTTIGYGDKTPLTLWLGRLLSAGFALLGISFFALPAGILSGFEALKVQ	kcnq5-
241	VLIFSSFLVYLVEKDANKEFSTYADALWWGTITLTTIGYGDKTPLTLWLGRLLSAGFALLGISFFALPAGILSGFEALKVQ	kcnq5-
321	EQHRQKHFEKRRNPAANLIQCVWRSYAADEKSVSIATWKPHLKALHTCSPTKKEQCEASSSQKLSFKERVRMASPRGQSI	kcnq5-
321	EQHRQKHFEKRRNPAANLIQCVWRSYAADEKSVSIATWKPHLKALHTCSPTN-----QKLSFKERVRMASPRGQSI	kcnq5-
401	KSRQASVGDRRSPSTDITAEGSPTKVQKSWSFNDRFRPSLRKSSQPKPVIDADTALGTDDVYDEKGCQCDSVEDLT	kcnq5-
392	KSRQASVGDRRSPSTDITAEGSPTKVQKSWSFNDRFRPSLRKSSQPKPVIDADTALGTDDVYDEKGCQCDSVEDLT	kcnq5-
481	PPLKTVIRAIRIMKFHVAKRRRKETLRPYDVKDVEIQYSAGHLDMLCRIKSLQTRVDQILGKGQITSDKKSREKITAHE	kcnq5-
472	PPLKTVIRAIRIMKFHVAKRRRKETLRPYDVKDVEIQYSAGHLDMLCRIKSLQTRVDQILGKGQITSDKKSREKITAHE	kcnq5-
561	TTDDL SMLGRVVKVEKQVQSI ESKLCLLDIYQQVLRKGSASALALASFQIPPECEQTSQSPVDSKDLSGSAQNSGC	kcnq5-
552	TTDDL SMLGRVVKVEKQVQSI ESKLCLLDIYQQVLRKGSASALALASFQIPPECEQTSQSPVDSKDLSGSAQNSGC	kcnq5-
641	LSRSTSANISRGLQFILT PNEFSAQT FYALSPTMHSQATQVPISQSDGSAAATNTIANQINTAPKPAAPTTLQIPPLP	kcnq5-
632	LSRSTSANISRGLQFILT PNEFSAQT FYALSPTMHSQATQVPISQSDGSAAATNTIANQINTAPKPAAPTTLQIPPLP	kcnq5-
721	AIKHLPRPETLHPNPAGLQESISDVTTCLVASKENVQVAQSNLT KDRSMRKS FDMGGETLLSVCMPVPKDLGKSLSVQNL	kcnq5-
712	AIKHLPRPETLHPNPAGLQESISDVTTCLVASKENVQVAQSNLT KDRSMRKS FDMGGETLLSVCMPVPKDLGKSLSVQNL	kcnq5-
801	IRSTEELNIQLSGSESSGRSGSQDFYPKWRESKLFITDEEVGPEETETDTFDAAPQAPAREAAAFASDSLRTGRSRSSQSIC	kcnq5-
792	IRSTEELNIQLSGSESSGRSGSQDFYPKWRESKLFITDEEVGPEETETDTFDAAPQAPAREAAAFASDSLRTGRSRSSQSIC	kcnq5-
881	KAGESTDALSLPHVKLK	kcnq5-
872	KAGESTDALSLPHVKLK	kcnq5-

1 MKDVEGRCVLLNSAARAGDGLLIGTRAATIGGGGLRESRRKQKQARMSLLGKPLS---YTSQSQR---NVK kcnq5.PR  
 1 MVQ-KSPNGGVYPCPSGEKKLVGVGLDPGAPDSTRDQALLIAGSEAPKRGSLISKPRAG-CACAGKPPKNAF----- fiKCNQ2.PR  
 1 MAEAPPRRIGLGPFGDAPRAELVALTAVQSEQEAGGGGSPRRGLLISPLPP-CAPLPGSGSGSACGQRSSAAHKR fiKCNQ4.PR  
 73 YRRVQNYLYNVLERPRGWAFIYHAEVFLVFCCLILSVFSTIPEHTKLASSCLLILEFVMIVVFGLEFIIRIWSAGCCCR kcnq5.PR  
 74 YNKLQNFLYNVLERPRGWAFIYHAEVFLVFCCLVSVFSTIKEYEKSSEGALVILEIVTIVVFGVEYEVIRIWSAGCCCR fiKCNQ2.PR  
 80 YRRLQNWYNVLERPRGWAFIYHAEVFLVFCCLVSVFSTIJOEHOELANECLLILEFVMIVVFGLEYIVRWSAGCCCR fiKCNQ4.PR  
 153 YRGWQRLRFARKPFCVIDILVLIASIAVSAKTQGNIFATSALRSRFLQILRMVMDRRGGTWKLLGSSVVAHASKELI kcnq5.PR  
 154 YRGWQRLRFARKPFCVIDIMVLIASIAVLAAGSQGNVFAATSALRSRFLQILRMVMDRRGGTWKLLGSSVVAHASKELI fiKCNQ2.PR  
 160 YRGWQRLRFARKPFCVIDILVLIASIAVLAAGSQGNVFAATSALRSRFLQILRMVMDRRGGTWKLLGSSVVAHASKELI fiKCNQ4.PR  
 233 TAWYIGFLVLIESFLVYIVLEKDKANKEFSTYADALWNGTITLTITIGYGDKTPLTWLGRLLSAGFALLGISFFALPAGILG kcnq5.PR  
 234 TAWYIGFLVLIESFLVYIVLEKDKANKEFSTYADALWNGTITLTITIGYGDKTPLTWLGRLLSAGFALLGISFFALPAGILG fiKCNQ2.PR  
 240 TAWYIGFLVLIESFLVYIVLEKDKANKEFSTYADALWNGTITLTITIGYGDKTPLTWLGRLLSAGFALLGISFFALPAGILG fiKCNQ4.PR  
 313 SGFALKVQEQHQRKHFEKRRNPAANLIQCVWRSYAAD-EKSVSIATW-----KPHLKA- kcnq5.PR  
 314 SGFALKVQEQHQRKHFEKRRNPAANLIQCVWRSYAAD-EKSVSIATW-----KPHLKA- fiKCNQ2.PR  
 320 SGFALKVQEQHQRKHFEKRRNPAANLIQCVWRSYAAD-EKSVSIATW-----KPHLKA- fiKCNQ4.PR  
 365 TH-----TCSPTKKEQGEASSQRLSFAERVRMASP-RGQSIKSRQASVGDRRRSPSTDLTAEG-SP kcnq5.PR  
 393 LAFRKDPPEPSPS-----QKVSILKDRV-FSSPRGVAAGKGSPOACTVRRSPSADQSLED-SP fiKCNQ2.PR  
 397 LEVRRAEVPPDGAPSRYPVATCHRPGSTSFCPGESSRMGIKDRIRMGSSQRRTGPKSKQOILPPTMPTSPSSEVGEATSE fiKCNQR.PR  
 424 TKVQKSWSFNDRTFRFESRLKSSQPKVIDADTAIGTDDVMDKGCQCQDVSEDLTPPLKTVIRAIRIMKFLVAKRKEK kcnq5.PR  
 450 SKVFKSWSFNDRTFRFESRLKSSQPKVIDADTAIGTDDVMDKGCQCQDVSEDLTPPLKTVIRAIRIMKFLVAKRKEK fiKCNQ2.PR  
 477 TKVQKSWSFNDRTFRFESRLKSSQPKVIDADTAIGTDDVMDKGCQCQDVSEDLTPPLKTVIRAIRIMKFLVAKRKEK fiKCNQ4.PR  
 504 ETLRPYDVKDVIQYSAGHLDMICRIKSLQTRVDQILCKGQITSDDKKSREKIT---AEHITDDLMLGRVVVKVEKQVQS kcnq5.PR  
 529 ETLRPYDVKDVIQYSAGHLDMICRIKSLQTRVDQIVGRGPAITDKDR---TKGPAEALPEDPSMMGRGLGKVEKQVLS fiKCNQ2.PR  
 551 ETLRPYDVKDVIQYSAGHLDMICRIKSLQTRVDQIVGRGPAITDKDR---TKGPAEALPEDPSMMGRGLGKVEKQVQS fiKCNQ4.PR

FIG. 2

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581 IESKLDCLIDTYQVLRKGSASALAIASFQFPEFECEQTSQSPVDSKDLSSAQNGLSRSTSANISRLQLQFILTPN kcnq5.PR
605 MEKKLDLFLVNIYMQ--RMGIPPTETETAYEGAK--EPEPAPPYHSHEDSRE--HVDRHGQIVKIVRSSSSHG-----QK
629 IEHKLDLILGFMYSRCLRSGLTSASLG--AVQVLEFEDITSDYHSPVDHEDISVSAQT-----fiKCNQ4.PR

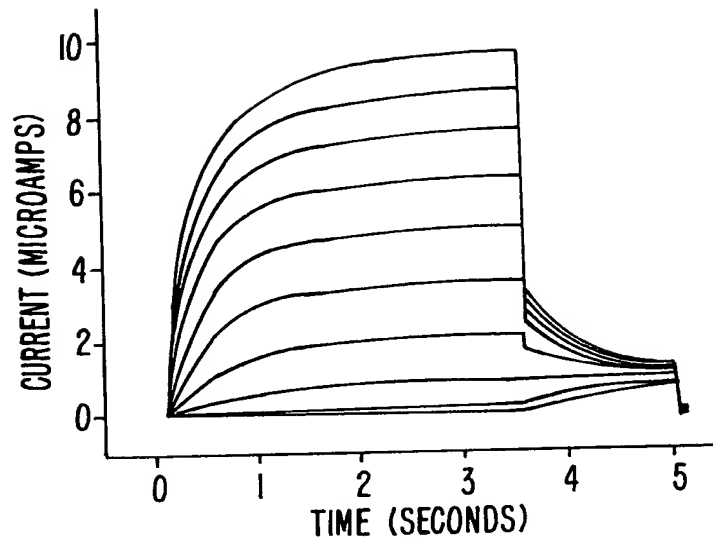
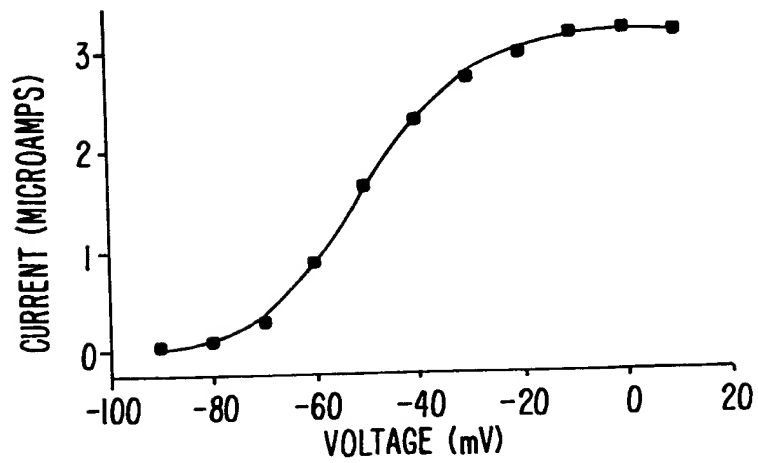
661 EFSAQTFYALSPTMHSQATQVPISSQSDGSAAVAANTIANQINTAPKPAAPTTLQTPPPLPAIDHPPRPETLHPNPAGLQE kcnq5.PR
672 NESAP---PAAEPVQCPSSTSWQPPQSHPRQGHGUSPVGDH-----GSLVRIPPPFAHERSLPAYGGGNRASMEFL- fiKCNQ2.PR
684 -----fiKCNQ4.PR

741 SISDVTTLVASKENVQVAQSNITKDRSMRKSFDMGGEITLSVCPMPKDIIGKSLSVQNLIRSTEEINIQISGSESSGSR kcnq5.PR
739 ROEDTPGQ-----RPPEGTL-----RSDTISISIPSVDDHEELERSFSGFSISQSKENTLD-AUNSCYAAVAP fiKCNQ2.PR
684 -----LSISRSVSTNM-----fiKCNQ4.PR

821 GSQDFYPKWRESKLETTDEEVGPEETETDTFDAAFOHAREAAAFASPSLRTGRSRSSQSIKAGESTDALSPLPHVKLK. kcnq5.PR
799 CAK-----VRPYIAEGESDSDDLCTPCGPPERSATGEGPFGDVGWAGPRK-----fiKCNQ2.PR
695 -----D-----fiKCNQ4.PR

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FIG. 2

*FIG. 3A.**FIG. 3B.*

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KCNQ5

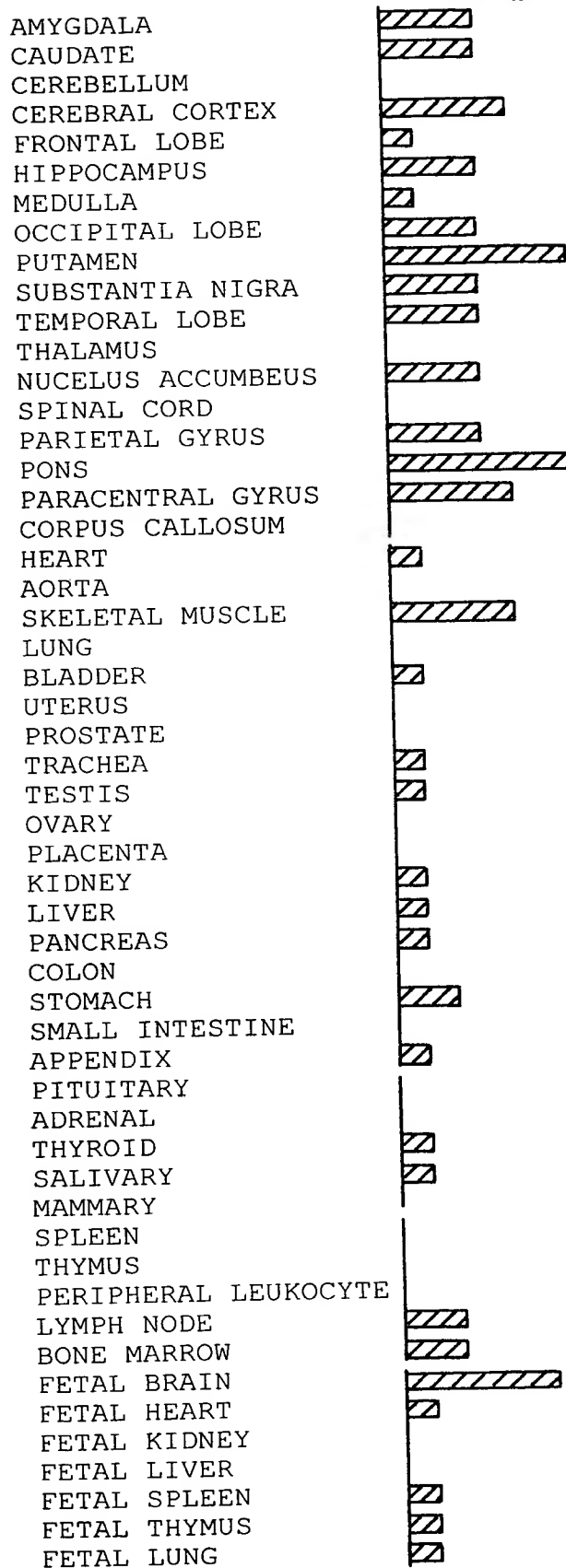


FIG. 4.